

*[Handwritten signature]*



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/076,901	02/13/2002	Lionel Denecheau	FR920010001US1	3664
45092	7590	09/30/2005		
HOFFMAN, WARNICK & D'ALESSANDRO LLC 75 STATE ST 14TH FL ALBANY, NY 12207			EXAMINER DENNISON, JERRY B	
			ART UNIT	PAPER NUMBER
			2143	
DATE MAILED: 09/30/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/076,901

Applicant(s)

DENECHAU ET AL.

Examiner

J. Bret Dennison

Art Unit

2143

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 July 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) \_\_\_\_\_ is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☒ Claim(s) 6-12 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. This Action is in response to Application Number 10/076,901 received on 13 February 2002.
2. Claims 1-12 are presented for examination.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Hinchey et al. (U.S. Patent Number 5,999,541).

3. Regarding claims 1 and 2, Hinchey disclosed a method, for use on a LAN wherein a plurality of stations are physically connected to a shared transmission medium and operate according to a collision protocol, for providing a collision-free protocol that operates concurrently with the collision protocol, the method comprising the steps of:

forming a logical ring among a subset of the plurality of physically connected stations physically connected to the shared transmission medium;

circulating a token among stations of the logical ring;

transmitting, according to the collision protocol, from a first station that is a member of the logical ring, only while the first station holds the token; and

transmitting, according to the collision protocol but without regard for the token, from a second station that is physically connected to the shared transmission medium but not a member of the logical ring [Hinchey, Fig. 1, col. 1, lines 22-26, Hinchey disclosed integrating token ring network across a LAN, col. 2, lines 60-65, col. 3, lines 1-12, Hinchey disclosed being able to transmit a Token Ring packet over an Ethernet network. Figure 1 of Hinchey shows computers set up in a token ring over a LAN, which also includes computers that are not part of the token ring. This implies that a virtual token ring is set up within a local area network in which all computers have the ability to communicate with each other, whether they are part of the token ring or not. The computers that are part of the token ring are still sending a modified token ring packet over the Ethernet network. Therefore packets are being transferred both in a collision protocol (Ethernet) and a collision-free protocol (Token Ring)].

4. Regarding claim 4, Hinchey disclosed the limitations, substantially as claimed, as described in claim 2, including wherein each station of the logical ring includes a collision-control sublayer that comprises a transmit queue (Hinchey, col. 2, lines 1-20, Hinchey disclosed all stations of the token ring sending packets on Ethernet, meaning that each station must have a transmit queue on the collision-control sublayer).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hinchey in view of obviousness.

5. Regarding claim 3, Hinchey disclosed the limitations, substantially as claimed, as described in claim 2. Hinchey does not explicitly state wherein the shared transmission medium complies with IEEE Standard 802.3. However, IEEE Standard 802.3 is a conventional frame based data communications protocol for Ethernet. Therefore it would have been obvious for a network administrator to use IEEE Standard 802.3 as the protocol for the Ethernet system of Hinchey to follow a standard protocol for communication. For further information on Ethernet Standards, see Rostoker et al. (U.S. 5,802,287).

6. Regarding claim 5, Hinchey disclosed the limitations, substantially as claimed, as described in claim 2. Hinchey does not explicitly state wherein said transmitting step includes, in said any one station part of said logical ring, the further steps of:

- checking whether said any one station holds said token or not;
- if not, keep waiting until said token is received;
- if holding said token, checking if said transmit queue is empty;
- if not empty, placing a first or only frame from said transmit queue on said shared medium, thus transmitting said frame;

if empty, skipping the placing step;  
retrieving an ID of an immediate next station in sequence in said logical ring;  
forwarding said token to said immediate next station; and  
resuming to first checking step to wait for a next occurrence of said token.

In an analogous art, Zhao disclosed normalized proportional synchronous bandwidth allocation in a token ring network by setting a maximum transmission time wherein the functionality of sending messages on a token ring is described. Figure 4 of Zhao shows checking to see if a token arrived (Zhao, Fig 4, 84), checking if the transmit buffer is empty (Zhao, Fig 4, 88), transmitting data (Zhao, Fig 4, 94), releasing the token to the next station and return to checking for a token (Zhao, Fig 4, 106, 84).

Hinchey disclosed using a token ring system over Ethernet packets, but does not provide detail for the functionality of the token ring. Zhao provides the functionality of the token ring. Therefore it would have been obvious to one in the ordinary skill in the art at the time of the invention to be motivated to combine the teachings of Hinchey and Zhao to provide bandwidth allocation in a real time distributed system (Zhao, col. 2, lines 43-50).

7. Regarding claim 9, Hinchey disclosed the limitations, substantially as claimed, as described in claim 5, including wherein said step of checking whether said any one station holds said token or not includes the further steps of:

checking whether said token has been received, if said token has been received, resetting a RTT (Ring Token Timer) and keep cycling (Zhao, col. 10, lines 20-35);

if said token has not been received, checking whether said RTT has elapsed or not; if said RTT has not elapsed, keep cycling (Zhao, col. 10, lines 20-35);

Zhao also discloses a token rotation time available to each station to transmit messages (Zhao, see Abstract).

However, Hinchey and Zhao do not explicitly state if said RTT has elapsed, issuing a RR (Ring Restart) message to inform all stations of said logical ring to restart insertion. It would have been obvious to one in ordinary skill in the art to have the station issue a restart to inform all other stations of the logical ring to restart insertion in case of failure to one of the stations causing the path to be broken.

#### ***Allowable Subject Matter***

8. Claims 6-8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 10-12 are objected to under 37 CFR 1.75 as being a substantial duplicate of claims 2, 6-8. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

#### **Response to Amendment**

Applicant's arguments and amendments filed on 7/8/2005 have been carefully considered but they are not deemed fully persuasive.

Applicant's arguments with respect to claims 1, 2, and 4 have been fully considered but they are not persuasive. Applicant's arguments include the failure of previously applied art to expressly disclose the teachings of "stations physically connected to a shared transmission medium" [see Applicant's Response, page 10].

However, Examiner submits that Hinchey, as shown in the above rejection, clearly disclosed the broad concept of clients physically connected to a shared medium as shown in Fig. 1, and as acknowledged by Applicant [see Applicant's response, page 9] as well as show in the specification of Hinchey (Hinchey, col. 2, line 60 through col. 3, line 10). Microsoft Computer Dictionary provides the definition of a LAN as follows:

"a group of computers and other devices dispersed over a relatively limited area and connected by a communications link that enables any device to interact with any other on the network."

Therefore, on a LAN, computers are connected through a communications link. The claimed invention describes "a method for use on a LAN wherein a plurality of stations are physically connected... forming a logical ring". Hinchey disclosed Token Ring LANs. Therefore it is evident from the mappings found in the above rejection that the Hinchey disclosed the teaching of physically connected computers in a LAN, as defined by the term "LAN". Further, it is clear from the numerous teachings (previously and currently cited) that the provision for using "Token Ring LANs" was widely implemented in the networking art.



Thus, Applicant's arguments drawn toward distinction of the claimed invention and the prior art teachings on this point are not considered persuasive. It is also clear to the Examiner that Hinchey clearly taught the independent claims of the Applicant's claimed invention with respect to the above rejection.

Applicant's arguments with respect to claims 1, 2, and 4 are deemed moot in view of the following new grounds of rejection, necessitated by Applicant's amendment to the claims, which significantly affected the scope thereof.

Furthermore, as it is Applicant's right to continue to claim as broadly as possible their invention, it is also the Examiner's right to continue to interpret the claim language as broadly as possible. It is the Examiner's position that the detailed functionality that allows for Applicant's invention to overcome the prior art used in the rejection, fails to differentiate in detail how these features are unique. As it is extremely well known in the networking art as already shown by Hinchey as well as other prior arts of records disclosed Token Ring LANs are taught as well as other claimed features of Applicant's invention. By the rejection above, the applicant must submit amendments to the claims in order to distinguish over the prior art use in the rejection that discloses different features of Applicant's claimed invention.

It is the Examiner's position that Applicant has not yet submitted claims drawn to limitations, which define the operation and apparatus of Applicant's disclosed invention in manner, which distinguishes over the prior art.

Failure for Applicant to significantly narrow definition/scope of the claims and supply arguments commensurate in scope with the claims implies the Applicant intends

broad interpretation be given to the claims. The Examiner has interpreted the claims with scope parallel to the Applicant in the response and reiterates the need for the Applicant to more clearly and distinctly define the claimed invention.

### ***Conclusion***

**Examiner's Note:** Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

In the case of amending the claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within


TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to J. Bret Dennison whose telephone number is (571) 272-3910. The examiner can normally be reached on M-F 8:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A Wiley can be reached on (571) 272-3923. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
J. B. D.  
Patent Examiner  
Art Unit 2143

  
DAVID WILEY  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100